Energy solutions for a changing world

Policy Frameworks for Energy Efficient Power Systems
Case Study: Arkansas

Presentation to MEEA's Indiana Thought Leadership Roundtable

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The Regulatory Assistance Project (RAP)

We are a global, non-profit team of experts focused on the long-term economic and environmental sustainability of the power sector, providing assistance to government officials on a broad range of energy and environmental issues.

About RAP – US

RAP provides technical and policy support at the federal, state and regional levels, advising utility and air regulators and their staffs, legislators, governors, other officials and national organizations.

We help states achieve ambitious energy efficiency and renewable energy targets and we provide tailored analysis and recommendations on topics such as ratemaking, smart grid, decoupling, and clean energy resources. RAP publishes papers on emerging regulatory issues and we conduct state-by-state research that tracks policy implementation.

The Clean Energy Ministerial's U.S. Strategic Engagement on Energy Efficiency in Arkansas

The task of the Regulatory Assistance Project (RAP) on behalf of the Department of Development was to select one state to assist in developing its energy efficiency policies and programs. RAP chose Arkansas after evaluating numerous criteria for determining the best venue.

The Selection Criteria

- ✓ Level of Energy Efficiency (ACEEE Scorecard – Arkansas was 38th)
- ✓ Regulatory Climate
- ✓ Commitment
- ✓ Population and Geography (AR is 33rd; represented SE opportunity)
- ✓ Electric Rates – low rates, high usage
- ✓ Clean Air/Fossil Fuel Reliance –high percentage
- ✓ Timing
- ✓ Legal Authority
- ✓ RAP Review

The Process

Once Arkansas was selected, RAP met with the Arkansas Commissioners and their staff to outline a work plan with rough timelines. Led by Chairman Honorable, the group met over the course of a day and developed an ambitious consensus outline of areas the Commission wanted to address.

Issues to be Addressed

- Doubling electric energy efficiency targets and more than doubling gas energy efficiency targets;
- A new incentive structure for electric and gas utilities designed to promote longer-term achievement and more in-depth energy efficiency projects, particularly at industrial sites;
- More robust utility avoided cost analysis;
- Proposed inclusion of customer non-energy benefits and societal benefits in energy efficiency screening;

Issues to be Addressed

- Proposed continuous program improvements through creation of a statewide collaborative for electric and gas utilities;
- Creation of dual-fuel programs, including leveraging utility dollars with weatherization programs;
- Statewide data reporting protocol;
- Consideration of decoupling sales from revenues; and
- Moving the Integrated Resource Plan (IRP) process from guidelines to comprehensive rules.

Phase One – The First Six Months

- Expert review and commentary on the utility LCFC and incentive tariff filings
- Expert analysis and on-the-ground assistance to optimize and coordinate Arkansas weatherization programs
- Initiating CHP analysis in Arkansas
- Laying the groundwork for the next three years.
  - Next three-year EE cycle
  - IRP Rules
  - Decoupling
- Arkansas Energy Plan
- Coordination of utility and environmental planning.

Phase One – The Second Six Months

- Energy Efficiency Roadmap 2 – a comprehensive proposal was issued by the Commission for comment on January 7, 2013
- Comments from stakeholders were evaluated
- Order issued on September 9, 2013

The Stakeholders

Stakeholders who are part of the Parties Working Collaboratively (PWC) included:

- The General Staff of the Arkansas Public Service Commission
- The Arkansas Attorney General
- The Electric Companies: Entergy Arkansas, Inc.; Southwestern Electric Power Company; Oklahoma Gas and Electric Company; and The Empire District Electric Company
- The Gas Companies: Centerpoint Energy; Arkansas Gas: SourceGas Arkansas, Inc.; and, Arkansas Oklahoma Gas Corporation
- Arkansas Community Action Agencies Association
- Arkansas Advanced Energy Association, Inc.
- Walmart Stores Arkansas LLC
- The National Audubon Society, Inc.
- The Sierra Club
- Arkansas Electric Energy Consumers and Arkansas Gas Consumers

Phase Two – The Energy Efficiency Goals

- **Energy Efficiency Goals:** In the Quick Start program that covered the first three-year phase on EE in Arkansas, the EE benchmarks were set as follows:

Annual Energy Savings as a Percentage of 2010 Retail Sales

	2011	2012	2013
Electric	0.25	0.50	0.75
Gas	0.20	0.30	0.40

Under the Commission's proposed order, the EE targets for the next three-year cycle were established as follows:

Annual Energy Savings as a Percentage of 2012 Retail Sales

	2014	2015	2016	2014-2016 Cumulative
Electric	1.00	1.25	1.50	3.75
Gas	0.60	0.80	1.00	2.40

EE Target Adopted on PSC Order

- Majority of parties asked for Potential Study – Commission reframed the request as one to identify EE potential.
- Parties asked that EE level be frozen while study on-going
- The Commission ruled that the goal for 2014 would continue at 2013 levels and increase in 2015 to 0.90 percent for electric and 0.50 percent for gas utilities.
- Once the Potential Study is completed, goals will be set by the Commission for 2016 and 2017.

Electric (0.75% goal):	% of Commission Goal/%Sales*	Actual % of 2013 retail sales**	2013 TRC Net Benefits
EAI	135%/1.01%	0.90%	$72.1 million
SWEPCO	110%/0.83%	0.60%	$5.9 million
OG&E	80%/0.60%***	0.49%	$6.8 million
Empire	15%/0.11%	0.12%	0
			$83.8

Gas (0.40% goal):			
CenterPoint:	134%/0.50%	0.48%	$18.1 million
SGA:	174%/0.70%	0.59%	$5.2 million
AOG:	150%/0.60%	0.60%	$1.9 million
			$25.2 million
			$83.8
			$25.2
			$109.0 million

* Savings, as calculated for the purpose of incentives and goal achievement (*i.e.*, as a percentage of 2010 sales, minus Self-Direct customer sales).
** Savings as a percentage of total 2013 kWh or ccf sales, not adjusted for Self Direct.
***OG&E reached 79.62% of the goal. Because it did not actually reach 80%, it did not earn incentives.

RATE:

Electric:	Requested Residential EECR per 1000 kwh or 50 Ccf	Change from last year
EAI	$5.38	+$1.82****
SWEPCO	$3.36	-$1.14
OG&E	$2.63	+$0.65
Empire	$1.54	-$0.93

Gas:

CenterPoint:	$1.01	-$0.27
SGA:	$0.94	-$0.11*****
AOG:	$2.21	-$0.07

****EAI's requested rate increase includes significant prior under-recovered costs.
*****SWG uses a 54 Ccf per month average residential bill volume rather than 50 Ccf typical residential bill volume.

Proposed Incentive Mechanisms Based on 3 Year Budget of $120 Million

Performance Level	% of Net Benefits Achieved	% of Budget Available	3-Yr Available Incentive
Threshold	80%	4%	$4.8 million
Target	100%	6%	$7.2 million
Exemplary Cap	120%	8%	$9.6 million

Adopted Incentive Mechanism

- Incentive is based on annual achievements as opposed to 3-year cycle.
- The Commission retained the original proposal to set the upper end of the performance zone at 120 percent; to cap the incentive at the sliding scale between 4 percent and 8 percent of program budgets so that the incentive is capped at:
  - 4 percent of budgets for 80 percent achievement;
  - 5 percent for 90 percent achievement;
  - 6 percent for 100 percent achievement;
  - 7 percent for 110 percent achievement; and,
  - 8 percent for 120 percent achievement).

Avoided Costs for EE Cost-Effectiveness Analysis

- Avoided Energy Costs
- Avoided Capacity Costs
- Avoided Transmission and Distribution
- Line losses (Marginal over Average adopted)
- Non-Energy Benefits (NEBs) and EE Program Cost-Benefit Analysis

Advancing Energy Efficiency Program Comprehensiveness and Continuous Program Improvement

- Standardizing and achieving efficiencies in the delivery of whole house weatherization services for residential and small commercial customers;
- Developing joint-utility EE service offerings to national accounts customers;
- Exploring an expanded role in EE planning and implementation for Arkansas Manufacturing Solutions and the Arkansas Industrial Energy Clearinghouse, which is currently administered by the Arkansas Energy Office, and inviting these organizations' participation in the collaborative;

Advancing Energy Efficiency Program Comprehensiveness and Continuous Program Improvement

- Pursuing opportunities to greatly increase participation levels among and achieve deeper energy and demand savings in the industrial sector and retain potential self-direct (SD) customers in the utilities' programs or attract SD customers to return to participation in the Utilities' programs at the end of the current three-year cycle;
- Developing cost-effective commercial programs;
- Making utility EE programs more consistent across the state;
- Separating utility programs for new construction activities from retrofit programs;

Advancing Energy Efficiency Program Comprehensiveness and Continuous Program Improvement

- Strengthening utility EE programs with various delivery options to capture the greatest number of participants;
- Evaluating and improving utility planning assumptions, so that the EE plans provide a better reflection of the likely energy savings per participant, the cost per participant, and the number of participants; and
- Exploring the benefits and challenges involved in establishing and maintaining a statewide data base containing information regarding the EE activities of all the utilities. (Collaborative to develop)

Decoupling

January 2, 2013 invites utilities to file decoupling proposals with rate cases along the following parameters:

- Customer charges must be set at a level low enough to encourage conservation;
- Establishment of separate revenue-per-customer amounts for, at a minimum, residential, small commercial, and demand-metered commercial customers; and
- Establishment of a true-up mechanism that credits or collects from customers any over- or under-recovery of revenue, respectively.

On March 1, 2013, Entergy filed a rate case and included a placeholder for decoupling as part of their filing.

Decoupling

Other issues that the utility was required to address as part of a decoupling request in a rate case included the following:

- How frequently should revenues be reviewed and adjusted (for example, monthly, quarterly, semi-annually, or annually)?
- Should the rate impact of annual adjustments be capped, and if so what should be the treatment of any unrecovered or undistributed balances?
- Should existing tariff riders be consolidated into a new revenue reconciliation rider under decoupling? If not, should rider costs be coordinated with revenue adjustment?
- Should decoupling apply only to distribution costs or should it also include generation costs?

Decoupling

Other issues that the utility was required to address as part of a decoupling request in a rate case included the following:

- Should all elements of power supply, including investment-related costs and variable operating costs be converted into a comprehensive power supply cost recovery mechanism? Should revenue-per-customer amounts for each decoupled customer class be adjusted based on historical trends in use, trends in cost of service for the customer class (sometimes called a "k factor"), or for other purposes?
- What tariff classes, if any, should be excluded from the mechanism (such as tariff classes with less than ten customers, customers with fixed contract demands, and special contracts customers)?
- Should large industrial customers be excluded from the decoupling mechanism?
- Any other significant features of the decoupling proposal that are not specified above.

Integrated Resource Planning

- The Arkansas Public Service Commission currently has Guidelines in place for IRP that call for the utilities to file IRPs for informational purposes. The plans set forth in the IRP are not approved.
- A robust IRP will provide the Commission with better tools to evaluate all the alternatives for cost effectiveness.
- As of the date of this report, the RAP team has been working with the Commission on several drafts of the IRP rules that will provide both more information to the Commission and will create a decision-making process. An Order with the draft rule for comment is expected to be ready soon.

Lessons Learned

- The project should set forth the mission, but leave room for those implementing the mission to determine the best strategies for doing so.
- Provide assistance in regions where the assistance is truly well-received and desired.
- Meet early with the regulators to outline their needs and objectives.
- Stay in frequent contact with the Staff.

Lessons Learned

- Carefully select a team with the right expertise that can work well with the regulators.
- Be realistic about what can be accomplished in the afforded timeframe, giving consideration not only to the competing demands on the regulators, but also the impact on participating stakeholders.
- Be flexible and willing to adjust work plans and schedules as needed to achieve the project goals.
- Remember ultimately that the role is one of advisor and that the decisions belong with the Commission.
- Try to anticipate response of stakeholders.

About RAP

The Regulatory Assistance Project (RAP) is a global, non-profit team of experts that focuses on the long-term economic and environmental sustainability of the power and natural gas sectors. RAP has deep expertise in regulatory and market policies that:

- Promote economic efficiency
- Protect the environment
- Ensure system reliability
- Allocate system benefits fairly among all consumers

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Appendix A: Sources for Slides 14 & 15

"Entergy Arkansas, Inc., 2013 Annual Report, Workbook at Company Statistics tab" Docket No. 07-085-TF.

SWEPCO Annual Report, Docket No. 07-082-TF

OG&E Annual Report, Docket No. 07-075-TF

Empire Annual Report, Docket No. 07-076-TF

CenterPoint Annual Report, Docket No. 07-081-TF

AOG Annual Report, Docket No. 07-077-TF

SourceGas Arkansas Annual Report, Docket No. 07-078-TF.